INDEX OF SURGICAL PROGRESS.

CHEST AND ABDOMEN.

I. Cholecystotomy. By J. J. PRINGLE, M. D. (London), and A. PEARCE GOULD, F. R. C. S., (London). At the time of the operation the patient, a woman, æt. 55. was suffering so much from pain, sleeplessness and digestive troubles, and was emaciating so rapidiy that her only hope of relief seemed to lie in an exploratory operation.

Under ether Pearce Gould opened the abdomen by an incision four inches long at the upper part of the right linea semi-lunaris. Full antiseptic precautions were used, excluding the spray. The liver was found to be enlarged and the gall bladder obscured by firm adhesions. After these were dissected away the gall bladder was reached; it was contracted and contained two drachms of pale bile and mucus which were withdrawn by aspiration; when opened it was found to contain no gall stone. Owing to the depth at which it lay and to adhesions the gall bladder could neither be brought to the abdominal wound nor satisfactorily stitched together, its fundus was therefore freed from the liver, ligatured and cut off, the peritoneal edge of the stump being stitched over the cut mucous membrane with fine catgut. At a deeper level a gall stone was felt but it was so movable that it could neither be grasped and crushed nor pushed into the duodeum. The peritoneal cavity was then sponged out and the wound closed. The patient did not rally from the operation. She had intense pain about the wound relieved only by morphine, and developing "severe acute general bronchitis." Death in fifty-four hours.

At the post-mortem examination it was found that the divided cystic duct had leaked allowing the escape of bile-stained fluid which, however, had been shut off from the peritoneal cavity by recent adhesions. There were no signs of general peritonitis. The common and hepatic ducts

were enormously dilated into a continuous tube from the liver to within an inch of the duodenal orifice which was patent. Lying in the tube was a cylindrical gall-stone 1 inch long and $1^{7}/_{8}$ inches in circumference; it was shaped like a conical rifle bullet and weighed when dry 27 grs. A small probe was with difficulty passed from the cystic into the common duct. Both lungs were studded with subpleural hæmorrhages and extensive areas of collapse and broncho-pneumonia; the bronchi contained much frothy mucus.

This condition of the lungs it was believed had been the main cause of death and was attributed to the agency of the ether which had been administered as the anæsthetic. Had the depth of the wound and the number of adhesions not prevented the movable stone from being grasped with padded forceps, the firm condition of the walls of dilated duct would have allowed it to have been crushed through them with a good prospect of success.—*Lancet*, December 4, 1886.

II. Ricter's Hernia. By F. TREVES (London). By this is meant a form of hernia where a part only of the circumference of the small intestine in engaged in the hernial orifice and there strangulated. The part included is that furthest from the mesentery. This form is commoner in women than in men, and in femoral than in inguinal hernia. It is limited to adults, and may be either old or recent herniæ. The clinical and pathological conditions described were based upon the accounts of thirty-three recorded cases. The symptoms are milder than in other forms of strangulation; vomiting slighter, less frequent, often later in onset and very rarely feculent. Hiccough uncommon. The bowels may remain open throughout strangulation, or may act occasionally, or respond to aperients. Sometimes there is persistent diarrhœa. Tympanites is uncommon. The hernial tumor is very small, often not recognized. Gut is irreducible by taxis; reduction en masse not infrequent. Mortality very high, *i. e.*, 62.2%, probably from difficult of diagnosis, irreducibility of the gut and frequency of gangrene. Mortality after herniotomy proportionally high.—Abstract of paper read at the Medico-Chirurgical Society, December 14.—*Lancet*, December 18, 1886.

III. Cases of Laparotomy for Relief of Intussusception. By L. KNAGGS, F.R.C.S., (London), and Mr. DENT, (London). 1. A boy æt. 5½ years had presented symptoms of bowel disturbance for a week culminating in marked signs of intussusception. After two days persistence some temporary relief followed inflation of the bowels, with return of all symptoms in a more aggravated form in twenty-four hours. The abdomen was then opened in the middle line, and a tight intussusception of the ilium which was in turn invaginated loosely for three or four inches through the ileo-cæcal valver. As effotrs to relieve the intussusception failed, it was cut off, and the mesenteric vessels being ligatured, the open ends of the gut were stitched to the wound. The child did not rally and died in an hour and a half.

In his subsequent remarks the author adduces a number of fatal cases of intussusception, and shows that besides the danger of shock, the risk of rupturing the intestine by forcible distention with air or water is considerable, especially in young infants (under a year), apart from the possibility of ulceration or gangrene having already begun. In order to judge of the success inflation various indications have been brought forward, but Knaggs holds that much depends upon the position of the tumor. "If it is in the descending colon, the invagination is almost certain to be one of the large intestine, or of the ileo-cæcal variety, and in the large majority of instances of the successful employment of inflation or enemata that I have met with, the tumor was stated to have been situated on the left side or felt per rectum. If, however the tumor is on the right side or near the median line on the right side, there must exist considerable uncertainty as to its variety, and therefore disappearance of the tumor with distention of the abdomen must leave it doubtful whether the tumor has been disinvaginated or only obscured" "Sudden uniform distention of the abdomen is the most obvious sign that rupture has occurred."

Should harm or no good result from inflation the abdomen is to be opened without delay. Two tables are drawn up, one of eight successful cases after abdominal section, and the other of twenty-nine unsuccessful cases. From these the author concludes that the longer the continuance of acute symptoms the greater the patient's exhaustion,

and the greater the risk of sinking after the operation.—*Lancet*, June 4 and 11, 1887.

2. A case, reported by Mr. Dent, of St. George's Hospital, was a child, æt. 6 months, who for seventy-two hours before admission to the hospital had suffered from evident intussusception. Enemata had appeared to produce a good effect for a time, but it rapidly passed off. When the abdomen was opened a loop of bowel was found constricted by the sharp edge of a piece of mesentery of the ilium which was invaginated into the cæcum; the band was divided. The special features of the case were:

(1) That the intussusception was ileo-colic as well as ileo-cæcal.

(2) That there was the additional complication of internal strangulation.

(3) That the intussusception was easily reduced by operation.

Peritonitis had set in before the operation and the patient died in five hours after it.—*Lancet*, May 21, 1887.

IV. Colotomy for Malignant Disease of the Rectum. By Mr. H. CRIPPS (London). The patient, a woman, æt. 50, was first seen by the operator December 5. Her symptoms had begun in spring by pain in the back, followed by pain in defæcation, and afterwards by characteristic symptoms of rectal stricture. For three inches above the anus the bowel was healthy; then a firm, nodular mass, adherent to surrounding parts, could be felt, with an aperture admitting only the tip of the finger. She left hospital, but returned February 1, 1886, weaker, with symptoms aggravated, and the mass increased in size. February 8 lumbar colotomy was performed. For a week no fæces came by artificial anus. Then some came by both new and old openings. When discharged on March 8, 1886, everything came by the artificial anus. In April, 1887, she was much improved in health and strength in spite of an increase in the local growth. She had one good motion daily, and was able for her domestic duties. The artificial anus admitted the forefinger easily. Mucous membrane on a level with surrounding skin, which was soft and dilatable. The patient could control the opening, and had no involuntary escape.

In his subsequent remarks, Mr. Cripps states his belief that cases of rectal cancer are unsuitable for excision where the disease is not within easy reach from the anus, and where the tissues surrounding the bowel are involved. In such cases colotomy not only relieves from the symptoms of stricture, but gives rest to the affected part and so diminishes the activity of the malignant growth. The operation should be performed as soon as symptoms of stricture appear. The following are the details which Cripps believes contribute to a favourable result, as in this case. (1). There should be a minimum of fibrous tissue round the wound. This can be attained when the wound heals by first intention and when the skin and mucous membrane are directly united. When there is an interval it must be formed by granulation tissue. This will be followed by contraction. (2). The opening down to the gut should be made valvular by dividing the skin on a lower level than the fascia. (3). During healing any tendency to contract should be met by inserting a plug into the artificial anus.—*Lancet.* April 23, 1887.

CHAS. W. CATHCART (Edinburg).

V. The Surgery of Malformations of the Anus and Rectum. By M. JEANNEL (Toulouse). From a detailed study of the subject, the following results are obtained: 1. Among the various malformations of the anus and rectum, some are simple of diagnosis and others difficult.

(1). Those which are simple of diagnosis are:

a. All malformations affecting the anus alone;

b. Partial or total persistence of the cloaca;

c. Permeable constriction of the rectum; the simple horizontal partitioning of the lower extremity of the rectum, with a well-formed anus.

(2). Those which are difficult of diagnosis are:

a. Absence of the rectum, complicated or not with anal malformation:

b. Extended imperforation or atrophy, and double partitioning with or without intermediate constriction of the rectum, complicated or not with anal malformation.

2. For malformations of difficult diagnosis, a study of the micturition furnishes indications of great importance.

3. If no anus exists and if the rectal ampulla cannot be felt in the perineum, the deep urethra may also be wanting; there is then a malformation caused by absence of the primitive bud of the anus. In this case the intestinal cul-de-sac exists in the true pelvis and is probably in commuoication with the bladder; it should be reached through the perineum.

4. Total or partial absence of the rectum is distinguished from imperforation or atrophy of the rectum by the constant coexistence in the boy, of an intestioo-urinary communication, and io the girl of a vulvar anus.

5. There is no precise sign by which the height can be diagnosed at which the terminal cul-de-sac of the rectum is to be found in case of imperforatioo, atrophy or double partitioning of the rectum.

Perineal fluctuation, if the anus is absent, or fluctuation at the bottom of the anal cul-de-sac, if one be present, are observed but rarely and when the rectum is partitioned or atrophied to a small extent only.

In case of absence of the rectum, the ischia are the more frequently found to be brought abnormally near together.

However, exploration by the bladder or the vagina might give valuable indications; if the bladder or vagina fills the sacral hollow, the intestinal cul-de-sac is very high and colotomy is necessary.

6. In case of absence of the rectum, if there be a communication with the bladder, the gut is high up and colotomy is necessary forthwith; if there be a urethral communication, the gut is low and a perineal operation is required.

7. In case of vesical communicatioo, there is a great possibility of the coexistence of a malformation of the ureters and the genital canals.

8. The diagnosis betweeo intestino-vesical communication and rectourethral communication is very difficult indeed to establish, especially as the oecessity for surgical intervention is urgent and there is no time for a complete and detailed observation of the urinary function; the rules for the differentiation of hæmaturia and urethrorrhagia should be put in practice here.—*Revue de Chirurgie*, March and April, 1887.

JAMES E. PILCHER (U. S. Army)

EXTREMITIES.

I. **Treatment of Retraction of the Palmar Aponeurosis.** By Prof. KOCHER (Bern). That Dupuytren's finger-contracture does not depend on changes in the flexor-tendons is everywhere acknowledged. But amongst German writers there has been quite a dispute as to the relative participation of the palmar fascia and the skin. Koeher reports 4 cases operated by simple longitudinal incision of the skin and excision of the fascia. In this way he was better able to examine the parts in situ and later, through Prof. Langhaus, also histologically. The affection begins in a few foci. These lie partly in the aponeurosis itself, partly in the adjoining tissue. In the latter there is a proliferation of nuclei in the walls of the arteries, and also capillaries, on which a subendothelial very nuclear adventitia develops. In the aponeurosis the vessel carrying connective tissue increases and thickens and the cells multiply. The process even penetrates the fat tissue, by way of the capillaries. Though leucocytes were not found, yet the process might be called a chronic-plastic inflammation starting from the palmar fascia. The elasticity of the skin, is preserved, although it may at some points become secondarily involved. He holds that the correct procedure for the radical cure of Dupuytren's finger-contracture, resp. of retraction of the palmer aponeurosis consists in thorough extirpation of the thickened and shortened palmar fascia with its extensions, after simple longitudinal incision of the skin. This method is especially applicable in the early stages. His cases gave good results, though further limbering of the finger by manipulation, etc., was necessary, and some weakening of the fingers was not excluded. No operation, unless it include prophylactic excision of healthy parts of the fascia, can guarantee against relapses.

Gersung (1884) reported a successful case operated in like manner. —*Centbl. f. Chirg.*, 1887, Nos. 26 and 27.

II. **On the Transplantation of Fresh Pedunculated Flaps, etc.** By Dr. W. WAGNER (Königshütte). After restating the principles laid down by Maas [v. ANNALS, June, 1885, pp. 572–3] for this class of operations, W. proceeds to give 3 cases in which he succeess-

fully filled defects on the arm by flaps from the chest. In the first case the ulceration (from traumatic splintering of the ulna, severance of both wrist-arteries and destruction of skin to above the elbow) two flap operations were necessary. This patient complained greatly of the pain from prolonged fixation—by plaster—of the arm to the chest; the other two were not so much troubled in this regard. The connecting pedicle was served in 13, 12, 14 and 14 days respectively. W. does not lay as much weight as did Maas on careful stitching of the flap to its new surroundings, but considers it all-important that the flap lie firmly on the subjacent tissues. He urges the great value of this method in conservative surgery, large indolent ulcers and cases where contracture might result or become permanent.

In the discussion Hans Schmidt remarked that plastic operations near joints—for preservation of their mobility—should be made early, before the changes from inactivity have taken place.—Proceedings of XVI Germ. Surg. Cong. in *Centbl. f. Surg.*, 1887, No. 25.

GENITO-URINARY ORGANS.

I. On the Operative Treatment of Urinary Fistulæ (Urethral and Vesical). By A. WÖLFLER (Graz). After referring to previous methods and giving cases he sums up as follows: (1). Longitudinal and transverse defects of the permeable urethra demand sagittal or transverse urethrorrhaphy. (2). Such defects in an impermeable urethra call for circular resection and suture. (3). Where an impermeable urethra is resected and the distance between the ends proves too great for direct suture, the ends are to be gradually approximated by cuneiform excisions from the body of the penis. (4). In many cases of vesico-vaginal fistula it will be better to carefully prepare back the edges of the bladder and perform direct cystorrhaphy. In general he proceeds the same as in suture of the intestine.—Proceedings XVI Germ. Surg. Cong. in *Centbl. f. Chirg.*, 1887, No. 25.

WM. BROWNING (Brooklyn).

II. The Closure of the Vesical Wound After Suprapubic Cystotomy. By Dr. ALEXANDER BRENNER (Vienna). An experimental study in order to determine the most feasible mode of

closing the vesical wound in suprapubic operations on the bladder. The axiom that a bladder suture to be of any value must be a hermetical one (Grayson), has stimulated to the discovery of some other method of closing the vesicle wound than the one now in vogue. The experiments were made on the human cadaver and on dogs. The bladder was incised (after the ordinary methods of raising it into contact with the abdominal walls) to an extent of 2 to 3 centimeters in dogs. In the human cadaver the wound measured 4 to 5 centimeters, the bladder wound being fixed with tenacula or silk loops; the mucous membrane of the bladder was then drawn forward and isolated to an extent from the muscularis. A continuous suture (silk) was then passed around the border of the incision and running parallel to the free edge. The suture was passed 2 to 3 mm. from the free border of the incision and only through submucous connective tissue not going into the cavity of the bladder. [The drawing of such a suture and wound would resemble very much the appearance of a purse or pouch closed with one string. ED.] The free ends of the suture are then tightly drawn.

A second suture has been previously passed through the muscularis in an exactly similar manner. The suture in the mucosa being tightly drawn a mucous surface is brought into contact with mucous surface; the folded mass gives a stump with a rosette-shaped top. To prevent slipping the suture at the angles of the incision is passed further from the free edge of the opening (4 mm.) than at other points of the wound. The wound in the muscularis is left somewhat folded and smaller after the above procedure. The second suture of the muscularis is now tightened and the tissue of the mucosa stump covered by the muscularis. The interior of the bladder has an irregularly folded appearance, but it is not very much diminished in capacity. The above sutures were efficient when the bladder was filled artificially to the bursting point. The suture on the whole was satisfactory in the cadaver and on the dogs. It is hard to predict the effects which may be caused by the folding of the mucous lining of the bladder. If adopted, however, and feasible this suture may dispense with the introduction of the permanent catheter. Only two sutures are used. and a strong cicatricial stump results in the site of the incision.

HELFERICH (of Greifswald) in a critique on the above calls attention to the facts that the tight ligature of the diseased human bladder may give rise to areas of gangrene despite assertions of the author to the contrary; and again the permanent catheter has of late years been dispensed with where our present mode of sutures have given good and satisfactory results. Lastly, the artificial distention of the bladder is a misleading criterion of the efficiency of any suture.—*Fortschritte der Medicin*, No. 17, 1887.

H. KOPLIK (New York).

III. **The Diagnosis, Early Treatment and Radical Cure of Intra-Vesical Growths.** By Professor GUYON (Paris). Hæmaturia which is uninfluenced by external circumstances may be taken to be pathognomonic of vesical neoplasm. Where hæmaturia is renal there is always the pain of renal colic. Where there is great renal enlargement there is commonly varicocele. Where the kidney is much enlarged bimanual examination will detect it, but where the increase in size is slight, the author is able by means of two fingers in front and the other hand on the flank to appreciate a renal ballottement owing to the fact, which he asserts, that an enlarged kidney is always more mobile than a healthy one. The bladder may, when empty, be examined by a finger in the rectum and a hand deeply pressed down above the pubes.

Positive information as to the fact of hæmorrhage from the bladder itself may be obtained by withdrawing the urine, washing out the bladder and then observing a bloody discoloration of the injected fluid on making moderate pressure on the bladder from above.

Negative results from exploration with a metallic sound count for nothing.

Vesical growths arise almost invariably from its base, and they early infiltrate the bladder walls so that only those of the size of a pea or bean will be found confined to the mucous coat,

At a certain period of their growth they are separated from the deeper tissues by a newly-formed fatty layer. This layer is the guide of the surgeon in extirpating them from within, and its form will render his wound spoon-shaped, *i. e.*, wider at the surface than at the base.

The great difficulty in dealing with a basic growth is to avoid interfering with the ureters, complete extirpation being practically impossible. Excision of the projecting portion and scraping and cauterization of its base are the best means available.

The lecturer strongly urges early operation in cases of vesical growth.—*Le Prog. Méd.*, Jan. 29, 1887.

A. F. STREET (Westgate).

IV. Cutaneous Lesions of the Genitals Due to Diabetes. By A. FOURNIER (Paris). Pruritus of the genitals in both sexes is so often due to diabetes mellitus that the writer lays down the rule in all cases of this affection to examine the urine; he adduces several cases in which treatment of the constitutional disease alone produced any alleviation of this distressing affection. But besides causing pruritus and eczema (with or without the presence of cryptogamic parasites), diabetes leads occasionally to gangrenous ulceration of the genitals. A man came to the St. Louis Hospital with sloughing of the glans penis; venereal contagion was excluded, and his urine was found to be full of sugar. Anti-diabetic treatment with iodoform and the continuous immersion of the genitals soon led to marked improvement. A similar case is given occurring in a man aged 46, in which the glans rapidly passed into gangrene without suppuration, and another of gangrene of the scrotum (both in diabetics), quoted from Gubler.

The well known prevalence of phimosis and balano-posthitis amongst diabetic patients is noticed, and M. Fournier points out the grave risk attending circumcision. He advises strict attention to cleanliness, the use of some drying powder, and frequent injection beneath the prepuce of an alkaline lotion (bicarbonate of soda or borax). Simple balano-posthitis due to diabetes is sometimes mistaken for gonorrhœa, much to the detriment of the patient, and the liability to confound diabetic gangrene of the genitals with phagedænic chancres, etc., is well pointed out in this interesting review of what M. Fournier terms the "diabetides."—*Gaz. Méd. de Paris*, March 5 and 19, 1887.

J. HUTCHINSON, JUN. (London)

V. Treatment of Vaginal Hydrocele by Corrosive Sublimate Injections. By JAMES MILLER (London). The treatment advocated is as follows: After evacuation of the hydrocele sac, 15 min. of a solution of corrosive sublimate in water (1 gr. to the ounce) are injected and the canula withdrawn. The patient is allowed to go to his work as usual, wearing a suspensory bandage for a few days. In the four cases narrated this treatment was completely successful. In one only there was a slight pain the first night, in another some swelling for a few days, but all the patients were able to return to work at once and had no bad symptoms, The treatment seems to be as simple and as efficient as any that has been introduced.—*Lancet*, Dec. 4, 1886.

CHAS. W. CATHCART (Edinburgh).

VI. The Position and the Value of the Operation of Internal Urethrotomy. By G. BUXTON BROWNE, M.R.C.S. In speaking of the opinion of surgeons on the above subject, the author says that there are some who never perform the operation and others who view it with distrust.

This he imagines to be due to: (1). The possibility of very serious consequences after the operation in unpractised hands, etc. (2). The indiscriminate employment of internal urethrotomy by many of its advocates and their neglect of trial of simpler and safer methods of treatment.

He goes on to say that while internal urethrotomy should be the exception and not the rule, still there are certain cases where it is the only remedy, and that with certain precautions it may be made as safe as any operation in surgery. The author recommends one free division of the stricture in the floor of the urethra by means of Thompson's modification of Civiale's urethrotome; claiming that by its use we can regulate with much more precision the extent of the incision than with instruments which, working in a director, cut from before backwards.

The constant use of the bougie after the operation is indispensable. The precautions which Mr. Browne employs against urinary fever, are opiates.

The paper closes with the consideration of cases in which internal

urethrotomy is recommended. They are arranged in ten groups. In some the operation is absolutely indispensable, and in all it is the best method of treatment.

1. When time is an object.

2. In cases of meatal or penile strictures.

3. In cases where the gentlest interference by means of bougies is followed by rigor.

4. For resilient strictures.

5. Where much induration exists.

6. In impacted calculus behind a stricture.

7. In cases of urethral fistula associated with stricture.

8. In the catheter life of elderly men where a stricture prevents the passage of a fair-sized instrument.

9. In the treatment of perineal abscess where stricture coexists. Besides incising the abscess it is important to treat the stricture at once, if the risk of a fistula is to be avoided. Gradual dilatation is here of no avail.—*Brit. Med. Jour.*, April 16, 1887.

VII. Rupture of the Spongy Urethra; Suture. Mr. WRIGHT (Manchester). A man, æt. 54, was struck in the scrotum by a shaft prop. This was followed by swelling and inability to micturate.

Under an anæsthetic it was found that a catheter passed into a large cavity, but not into the bladder. A wound was discovered in the scrotum through which the catheter could be protruded. A little dissection showed that the urethra was torn completely across and that the ends of the canal were separated for a distance of from an inch to an inch and a half. These ends were brought together by four catgut sutures and a No. 10 silver catheter retained. The wound was left open. After the first fortnight the urine passed entirely through the urethra. Mr. Wright remarks: Complete rupture of the spongy urethra is of rare occurrence, and, so far as I know, primary suture has not been employed for it hitherto; it however seems to be the most rational treatment for such an accident, and in this case has had the best results. Had this not been done it is probable that the wide separation between the ends of the urethra would have necessarily left the

man with a permanent perineal fistula. For rupture of the membranous urethra, suture has already commended itself as a proper line of practice.—*Lancet*, April 30, 1887.

VIII. Three Cases of Stone in Boys; Removal by Suprapubic Cystotomy. By T. WALKER (Wakefield). CASE I.—Æt. 3 years. Rectal bag used; bladder distended with a warm solution of boracic acid. Uric acid calculus of eighty-nine grains removed. Bladder and abdominal walls sutured. No catheter nor drain employed. On the 5th day extravasation into tissues and scrotum took place. Convalescence on the 22d day.

CASE II.—Æt. 8 years. A rough stone of 50 grs. removed. No sutures to bladder, and only upper part of abdominal wound closed. No catheter nor drain employed. Rigor, 24 hours after operation. Abdomen tympanitic and tender. Fomentations and opium. Patient was discharged well in five weeks.

CASE III.—Æt. 4 years. A calculus weighing 20 grs. removed. Bladder wound closed carefully with fine catgut. Linea alba sutured with stout gut, and lastly the skin, only a small opening being left at lower part. No mention is made of catheter nor drainage tube. All urine passed through urethra. The wound healed quickly and without any complications.—*Lancet*, April 30, 1887.

XI. Rupture of Bladder. Operation. Death From Perincæal Hæmorrhage. Mr. T. PRIDGIN TEALE (Leeds). A man, æt. 25, was kicked in abdomen and perineum during a quarrel, and when seen complained of pain and inability to pass water. On the following day Mr. Teale observing a tympanitic abdomen with dulness of the flanks and hearing that the more recent catheterization had only drawn off an ounce or so of urine, operated for ruptured bladder.

He first did a perineal section and inserted an India-rubber drainage tube; then he performed abdominal section. A rent one inch in length was found not far from the apex on the posterior surface which was closed by 6 fine catgut sutures.

There was more oozing of blood from the perineal wound than

usual, which was accordingly plugged. Some hours afterwards fresh oozing occurred.

Becoming rapidly anæmic, the patient died on the following morning.

Mr. Teale remarks that the hæmorrhage might have been possibly due to the damage done to the perineum by the kick. If he were called to operate again in a similar case he would not think it necessury to insert the perineal tube, having regard to the experience ot others.—*Lancet*, June 4, 1887.

F. SWINFORD EDWARDS (London).

ULCERS, ABSCESSES, TUMORS.

I. **Treatment of Hæmorrhoids by the Forcible Dilatation of the Anus.** By Professor TRÉLAT (Paris). The only surgical means employed by M. Trélat for the cure of hæmorrhoids are dilatation of the sphincter and cauterization, the latter only in exceptional cases. He uses a bivalve speculum, especially made for him out of solid steel, with valves 11 centimetres 5 in length and set at right angles to the handles. This instrument can dilate the anus to such an extent that four fingers placed side by side can be introduced into it. It is very important for the patient to be thoroughly under the influence of an anæsthetic so that the anus can be steadily and gradually dilated without any risk of tearing the mucous membrane. It generally takes 3 or 4 minutes to get the speculum wide open; it is then closed and turned around so as to dilate the anus in another direction. This manœuvre is repeated two or three times in the various diameters of the anus, and when the anal ring has been thoroughly softened all round, the instrument is withdrawn and the operation is over. Occasionally, there is some insignificant loss of blood which is only to be dreaded if the patient has got into a serious state of anæmia. Here it is that recourse should be had to the thermo-cautery. Very little pain follows and all the dressing needed is a pad which is applied for the first 48 hours. Much is to be said in favor of the simplicity of the operation, but more in favour of the rapid disappearance of all the painful symptoms. The constant contractions of the sphinc

ter being stopped, there is no longer any tenesmus, nor any congestion of the piles themselves; and thus the hæmorrhages cease. So we see that the remedy does not assault the primary disease, but one of its consequences, the contracture of the sphincter. It is an indirect method. M. Trélat in his lecture reports 3 very good cases where there were large masses of internal piles and where the hæmorrhages had been so severe and frequent that the patients were in a most alarming state of anæmia. The patients who had all seemed at death's door had all their bad symptoms arrested at once and began to recover their health after one thorough dilatation of the anal sphincter.—*Le Progrès Médicale*, May 14, 1887.

LEONARD MARK (London).

II. **Some of the Rarer Forms of Rectal Fistulæ.** By Mr. EDWARDS (London). When a sinus runs upwards from the internal opening of a complete fistula the author holds that it should be slit up if submucous, but left alone if running beneath the muscular fibres. The internal orifice of a fistula, he thinks, is directly above the external, if the latter is in front of a transverse plane running through the centre of the anus; while if the external opening be anywhere behind this plane its inner opening will be in the middle line dorsally. "Horse-shoe fistulæ," *i. e.*, those bearing one or two external orifices on either side of the anus and an internal one in the middle line behind are to be treated as follows: "Complete division of the sphincter in the middle line dorsally, laying open the abscess cavity and internal opening, and the subsequent slitting up of each lateral sinus from the external orifice to the central dorsal incision," thus dividing the sphincter only once and at right angles to its fibres and slitting up all the sinuses. Some rarer forms of fistula were mentioned. — *Lancet*, May 28, 1887.

CHARLES W. CATHCART (London).

III. **Vascular Tumors of the Umbilicus.** By DR. COLOMBE (Lisieux, France). In this case a small purplish or violet growth was noticed at the age of twenty-six, the patient being a domestic servant. After existing eight years without causing any trouble it bled freely, the hæmorrhage ceasing on the application of perchloride of iron. Two years later Dr. Colombe was called to the patient on ac-

count of another attack of very severe hæmorrhage (which was compared to that from a wounded femoral artery). Ligature *en masse* of the growth stopped the bleeding, though a few days later it recurred in a slight degree. The nature of the tumor was doubtful. Dr. Colombe believed that the "accessory portal venules" at the umbilicus were dilated. There were no signs of hepatic obstruction or other cause for the bleeding.

M. Blum, in the *Archives de Médicine*, August, 1876, reported cases of vascular umbilical tumors, but they were all congenital, and in this case the patient was positive the growth had only developed in adult life.—*Gaz. Med. de Paris*, 1887, May 21.

J. HUTCHINSON JR., (London).

BONES, JOINTS, ORTHOPÆDIC.

I. **On Artificially Increasing the Growth of Bone.** By Prof. HELFERICH (Greifswald). This is advocacy of the principle of hyperæmia at the respective point in such cases as retarded and insufficient callus-formation after fractures, and necrosis with faulty regrowth on consequent spontaneous fracture.

An elastic rubber tube is passed around the limb centrally from the affected spot and tied tight enough to cause a limited compression and a slight venous congestion of the member. The patient can readily untie it when painful. Then the limb is continuously bandaged down and up from the diseased part to localize the hyperæmia. Plaster or splint dressings can be used at the same time. Numerous cases the last six years treated in this way have convinced him of its utility. The correctness of the principle is substantiated by experimental and other pathological experience. It must always be remembered, however, that this procedure can only cause an increase of bony growth never primary development.

Physiological as well as pathological osseous growth may also be increased by hyperæmia. A young growing bone may under this influence become thicker and longer. This fact he has utilized to remedy shortening from fracture or from infantile palsy, as also on the well side in one case of morbid elongation of the tibia in a 15-year-old

girl. The compression is at first applied for hours; soon, as a rule, both day and night. Patients readily learn to get along with it. It is contraindicated in tubercular bone-affections, after operations for malignant tumors, and where, *e. g.*, fractures are complicated by large granulating wounds. As stated by H. and in the discussion, a similar plan had been followed by Dumreicher, Nicoladoni, and Thomas (Liverpool). though H. seems to think that the double constriction—above and below—is original.—Rept. of XVI Germ. Surg. Cong. in *Centbl. f. Chirg.*, 1887, No. 25.

II. A Case of Cystic Degeneration of the Skeleton. By Dr. BRAMANN (Berlin). This condition was found in a woman of 34 years, who during her fourth pregnancy had suffered from severe pain in the sacrum and lower extremities. Half a year after premature delivery a spontaneous fracture of the right femur occurred. Later both femurs and tibiæ became painfully swollen, the former fracturing spontaneously. Then both arms and one forearm became affected in the same way. On admission the evidences of a typical advanced osteomalacia were present. The autopsy showed great softening of the bones, with atrophy of the cortex in the tubular ones and dilatation of the marrow cavities with numerous pea- to walnut-sized cysts. The latter were covered at some points by only a thin cortical layer, and had evidently occasioned the fractures.—XVI Germ. Surg. Cong. in *Centbl. f. Chirg.*, 1887, No. 25, Sept.

WM. BROWNING (Brooklyn).

III. Congenital Absence of Patella. M. PAUL REDARD. In an otherwise normal and healthy child, aged 20 months, no trace of the patella on the right side could be detected, the somewhat atrophic quadriceps being continued as a fibrous band into the tuberosity of the tibia. There was slight genu valgum and flat foot on this side, and though the knee appeared to be well developed but for the absence of the patella, flexion was much limited. The child's walk resembled that of a patient with a fractured patella, and a suitable support to the knee greatly improved the condition of things. Friedleben (*Jahresbericht f. Kinderheilkunde*, 1860) reported a case of sym-

metrical absence of the patella, but the femora were also undeveloped and several other osseous malformations existed. M. Bousquet (Soc. de Chirurgie, 1815) recorded extreme atrophy of the patella in a man aged twenty-one. Movements of the joint were hardly affected.—*Gaz. Méd. de Paris*, Feb. 5 and 12, 1887.

J. HUTCHINSON JR. (London).

IV. **The Influence of Resections of Tuberculous Joints in Producing Diffused Tuberculosis.** By THEODORE WARTMANN. An elaborate statistical paper. The cases are those operated on in the clinic of Feurer. They include cases of shoulder, elbow, wrist, hip, knee and ankle-joint—seventy-four cases in all, in subjects from children, to over 50 years of age. The points of moment directly bearing on the theme are that among 11 deaths from various causes in the above statistics one elbow resection died of old tuberculosis. Two of the wrist died subsequent to operation of old tuberculosis. In the hip cases 5 deaths, three of which were chronic tuberculosis. In only one case was acute miliary tuberculosis the cause of death. In one case of resection at the ankle there was a return of the disease after two months, and patient died, autopsy giving basilar meningitis (tubercular).

The author has followed the mode of classification of König in Göttingen. The latter divides his cases into (*a*) those who die immediately or within a short time after operation of general miliary tuberculosis. (*b*). Those where a return of the disease with suppurating processes ends in death of patient from general tuberculosis.

Wartmann, as result of his statistic, has among 74 cases of resection with 11 deaths one death belonging to each of these classes.

König, among thousands of cases, has observed 16 cases of inoculation tuberculosis (Impf tuberculosis) following operation for tuberculous disease of the bones. In all of the above cases those have been excluded which show on autopsy *chronic tuberculosis only*.

The author has then put himself to the great labor of searching the literature on the subject with the following general results:

Albrecht, 162 cases of resection joints with 75 deaths. Of these one case (wrist) died 6 months after operation with basilar meningitis.

One (ankle-joint) 1 year after operation died of general miliary tuberculosis. One (knee) died with miliary tuberculosis. One (knee) died 2 months after operation of general tuberculosis. Of the hip-joint cases 8 deaths came under the head of inoculation tuberculosis following operation.

Isaak records 1 case among 171 cases of resection.

Vetsch among 27 cases records 1 where death probably was due to inoculation.

Willemer in 63 cases of resection of all joints records 30 deaths. Five of these probably died of general acute tuberculosis following operation.

In one case of Willemer the acetabulum was found perforated, post-mortem. This condition is particularly favorable to the causation of an acute general tuberculosis. The author has in the Danish, French and English literature collected 144 cases, of which two died after operation of acute miliary tuberculosis.

Mensing, among 92 cases of knee resection, records 10 deaths, of which one resulted 14 days after operation of acute miliary tuberculosis.

Grosch collates 166 cases (wrist-joint) of which 120 are available as statistics. Forty-four of these died. Three deaths resulted from acute miliary tuberculosis.

Hirsch (wrist) records among 17 resections one death of acute tuberculosis.

Münch (foot and ankle) records 45 resections and 44 primary amputations (pre-antiseptic days, 1862–76) with five deaths. Two of these died of tuberculosis (one cerebral, one lung and intestine).

The larger works of Fock, Eulenberg, Lücke, Billroth, Leisrink, Ipsen, Hoffa have been unavailable for this statistic. French authors like Ollier, Boeckel, Verneuil only discuss the subject in a general way.

Complete English data have not been accessible to the author.

As a grand result, 837 cases of resection were collected with 225 recorded deaths. Of these deaths 26 followed the operation closely and were the result of acute general tuberculosis, probably induced by the operation. It would be interesting in the future to collate the

cases treated conservatively, and to note also the effects of antiseptic methods as a prophylactic against the outbreak of general tuberculosis.

In the above deaths it would be reasonable to suppose that a tuberculous focus opened during the operation gave abundant opportunity for the introduction of tubercle bacilli into the vessels and general circulation. In the second class of König's cases the supposition is that an eroded vessel, vein or lymph sac would afford the avenue for general infection. In all cases it must be remembered that extravasations of blood left behind after operation favor the enormous increase of numbers of bacilli. There are present all the conditions for their prolific increase and activity.

So far experimental researches on animals have not exactly duplicated the phenomena to be found in the human subject.—*Deutsch. Zeitschr. f. Chir.*, Bd. XXIV, Heft 5 and 6.

HENRY KOPLIK, (New York).

V. **Genu-Valgum and Osteoclasis.** E. KIRMISSON and O. LANNELONGUE (Paris). A specimen was shown at the Société de Chirurgie, interesting on account of the light it threw upon the anatomy of genu valgum It was the knee-joint of a child on whom osteoclasis had been performed with Robin's apparatus. The child was in the hospital for three months, and went out with a perfectly straight limb, but the deviation reappeared almost immediately.

The autopsy showed that in this case the principal thing to deal with was the bent condition of the lower extremity of the femur, which has been pointed out by Macewen, and that there was very little hypertrophy of the inner condyle.

M. Lannelongue knew of several cases which confirm this, and had found that the deformity so often reappeared in children six months after the performance of osteoclasis that he had quite given up the operation.—*Le Bull. Med.*, July 31, 1882.

LEONARD MARK (London).

WOUNDS.

I. **Drainage and Primary Union.** By M. CHENIEUX (Limoges). With drainage primary union cannot be obtained in the entire extent of the wound. The drain, whatever its nature or volume, always occupies a place where apposition cannot be effected. If it is large it prevents union in a proportional extent. In all cases the drain excites the wound and provokes a more or less abundant exudation. It is a relic of carbolic acid antisepsis, under which liquid was effused in abundance, and without drainage, detachment would have occurred. But now that we have corrosive sublimate, iodoform, biniodide of mercury, endowed with great antiseptic power, it is legitimate to simplify the dressing and seek for entire primary union by the suppression of drainage. For four years the author has dispensed with drainage in cases where he wished to obtain perfect union, with good success. In ablation of more or less extensive tumors he has always obtained perfect union. In a case of thyroidectomy, notwithstanding the vast extent of the wound and seven or eight ligatures, it had united without drainage. The union was perfect everywhere except at the level of the suprasternal depression, where the skin could not be brought into apposition, and even in that point there was no suppuration, and the cure was complete on the 18th day. In a case of abdominal hysterectomy, when the whole supravaginal portion of the uterus was removed with the broad ligaments and the ovaries, detaching extensive adhesions leaving vast bleeding surfaces, he abstained from drainage with good results. The patient got up on the 27th day. It is best to return the pedicle, to appose and unite the edges and not to be concerned with the fluids which have gravitated into the true pelvis. These fluids, composed of serum and blood, thanks to the use of sublimate, are perfectly aseptic and not irritant. They are in closed cavities in which they find the same conditions as exist in the space between the two ends of a divided muscle or tendon after myotomy or tenotomy. With drainage, on the contrary, these fluids become a vehicle for microbes. Aseptic fluids are easily and harmlessly absorbed. He concludes:

1. Drainage is an enemy to primary union of wounds

2. All wounds whose edges have been perfectly apposed and rendered aseptic should present primary union.

3. In all operations, such as ovariotomy and hysterectomy, where ligatures must be hidden and where large bleeding surfaces exist, drainage seems to be harmful rather than useful.

4. Exuded fluids seem to him to constitute reserve fluids and to be reabsorbed into the system. They are lost in case of drainage and become poisoned by microbes.—*French Congress of Surgery*, *Revue de Chirurgie.*, Nov., 1886.

JAMES E. PILCHER (U. S. Army).